



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,064	02/12/2002	Thomas Ciossek	038602-1324	4694
22428	7590	08/25/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			UNGAR, SUSAN NMN	
			ART UNIT	PAPER NUMBER
			1642	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,064

Applicant(s)

CIOSSEK ET AL.

Examiner

Susan Ungar

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE One MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1642

1. Claims 1-15 are pending in the application and are currently under prosecution.

2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

Group 1. Claims 1-4 are drawn to a nucleic acid encoding an MDK-1 polypeptide, classified in Class 536, subclass 23.1.

Group 2. Claim 5 is drawn to an isolated MDK1 polypeptide, classified in Class 530, subclass 350.

Group 3. Claims 6-7 are drawn to an antibody having a specific binding affinity to MDK1 polypeptide, classified in Class 530, subclass 387.1.

Group 4. Claim 8 is drawn to a method of detecting a compound capable of binding to MDK1 polypeptide, classified in Class 435, subclasses 4, 7.1.

Group 5. Claim 9 is drawn to an *in vivo* method for treatment of an organism having a disease or condition characterized by an abnormality in a signal transduction pathway which involves the interaction between a MDK1 receptor tyrosine kinase and a MDK1 binding partner, classified in Class 424, subclass 130.1.

3. Claim 10 links inventions (6-11)(A-D). The restriction requirement among the linked inventions is subject to the nonallowance of the linking claim(s), claims 10. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant

Art Unit: 1642

application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Group 6. Claims 10-12 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine kinase and a binding partner wherein said disease is a neuro proliferative disorder, wherein said to MDK1 receptor tyrosine kinase is truncated and lacks a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

Group 7. Claims 10-12 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine kinase and a binding partner wherein said disease is a two neuro degenerative disorder, wherein said to MDK1 receptor tyrosine kinase is truncated and lacks a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

Group 8. Claims 10-12 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine kinase and a binding partner wherein said disease is a cancer, wherein said to MDK1 receptor tyrosine kinase is truncated and lacks a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

Group 9. Claims 10-11 and 13 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine kinase and a binding partner wherein said disease is a neuro proliferative disorder, wherein said to MDK1 receptor tyrosine kinase is not truncated and does not lack a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

Group 10. Claims 10-11 and 13 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine and for kinase and a binding partner wherein said disease is a two neuro degenerative disorder, wherein said to MDK1 receptor tyrosine kinase is not truncated and does not lack a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

Group 11. Claims 10-11 and 13 are drawn to a method of screening potential agents useful for treatment of a disease or condition which involves some the interaction between a MDK1 receptor tyrosine kinase and a binding partner wherein said disease is a cancer, wherein said MDK1 receptor tyrosine kinase is not truncated and does not lack a kinase domain classified in Class 435, subclass 4. It is noted that Claim 13 will be examined in accordance with the election from among Groups (A)-(D).

For each of the inventions 6-11 above, restriction to one of the following is also required under 35 USC121. Therefore, election is required of one of inventions 6-11 and one of inventions (A)-(D). It is noted that this is not an election of species requirement in that each of the linked groups consists of one of inventions 6-11 above and one of inventions (A)-(D) below. It is noted that as drawn to the election of one of inventions (A)-(D), Applicant is required to elect an invention that is commensurate in scope with the MDK1 receptor tyrosine kinase elected from among Groups 6-11.

(A) MDK1.T1

(B) MDK1.T2

(C) MDK1. delta 1

(D) MDK1. delta 2

Group 12. Claims 15 is drawn to a method for diagnosis of a disease or condition characterized by an abnormality in a signal transduction pathway involving MDK1 receptor tyrosine kinase, classified in Class 435, subclass 7.1.

4. The inventions are distinct, each from the other because of the following reasons:

Inventions 1-3 as disclosed are biologically and chemically distinct, unrelated in structure and function, made by and used in different methods and are therefore distinct inventions.

Inventions 4-12 are materially distinct methods which differ at least in objectives, method steps, reagents and/or dosages and/or schedules used, response variables, and criteria for success.

The inventions of Groups 1/3 and 4-12 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (i) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § 806.05(h)]. In the instant case the polypeptide product as claimed and the antibody as claimed can be used in a materially different process such as an immunogen for the production of antibodies or anti-idiotypic antibodies respectively.

The inventions of Group 1 and 4-11 are not at all related because the nucleic acid of Group 1 is not used in any of the methods of Groups 4-11

5. Because these inventions are distinct for the reasons given above have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37

C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

8. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

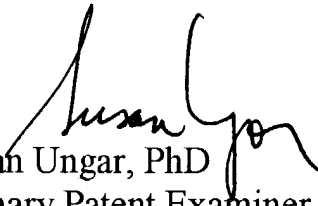
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Ungar, PhD whose telephone number is (571) 272-0837. The examiner can normally be reached on Monday through Friday from 7:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew, can be reached at (571) 272-0787. The fax phone number for this Art Unit is (703) 872-9306.

Art Unit: 1642

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Effective, February 7, 1998, the Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1642.



Susan Ungar, PhD
Primary Patent Examiner
August 20, 2004